

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

On Appeal to the Board of
Appeals and Interferences

Appellant(s)	: Hild et al.	Customer No.	: 28763
Serial No.	: 10/775,601	Examiner	: Sameh Tawfik
Filed	: February 20, 2004	Confirmation No.	: 1780
		Group Art Unit	: 3721
For	: FIBER-REINFORCED FILM PROCESSES AND FILMS		

REPLY BRIEF

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Sir:

This Reply Brief is submitted pursuant to 37 C.F.R. § 41.41 for the patent application referenced above in response to the Examiner's Answer dated July 23, 2009. The due date for this Reply Brief is September 23, 2009, and Appellant submits that the filing of this Reply Brief is timely. No new evidence is submitted with this Reply Brief.

TABLE OF CONTENTS

I.	STATUS OF CLAIMS	3
II.	GROUND OF REJECTION TO BE REVIEWED ON APPEAL	4
III.	ARGUMENT	5

I. STATUS OF CLAIMS

Claims 20-42 and 71-76 stand finally rejected under new grounds of rejections, and are the subject of this appeal.

Claims 1-19 and 43-70 stand canceled.

II. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The following new grounds of rejection were made in the Examiner's Answer dated July 23, 2009:

(1) the final rejection of claims 20-31, 33-41, 71, and 73 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,346,118 to Schrenk in view of U.S. Patent No. 3,765,922 to Chisholm and further in view of U.S. Patent No. 4,849,040 to Wood; and

(2) the final rejection of claims 32, 42, 72, and 74-76 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,346,118 to Schrenk in view of U.S. Patent No. 3,765,922 to Chisholm and further in view of U.S. Patent No. 4,849,040 to Wood and U.S. Patent No. 5,108,777 to Laird.

In accordance with 37 C.F.R. 41.41, Appellant respectfully requests review of all of the above rejections. Appellant's grounds for appeal include the remarks previously submitted in the Appeal Brief dated March 5, 2009, and subsequently filed in the Amended Appeal Brief on May 19, 2009, as well as the following remarks.

III. ARGUMENT

By this Reply Brief, Appellant maintains and incorporates the remarks originally submitted in the Appeal Brief dated March 5, 2009, and subsequently filed in the Amended Appeal Brief on May 19, 2009 (collectively, "Appeal Brief").

The Examiner has now provided an Examiner's Answer to respond to Appellant's Appeal Brief. In particular, the Examiner's Answer responds to Appellant's challenge of the official notice taken by the Examiner in rejecting the claims. The Examiner's Answer provides new grounds of rejection that are substantially the same as the grounds of rejection in the Final Office Action dated August 25, 2008, but further modified to cite additional references in an effort to show features that were previously the subject of official notice. In accordance with MPEP § 1208, Appellant "is required to file either a reply brief to maintain the appeal or a reply under 37 CFR 1.111 to reopen prosecution [in response to an] examiner's answer that contains a new ground of rejection." Appellant therefore provides the following additional remarks to address the arguments presented in the Examiner's Answer to maintain the appeal of this application.

Response to Arguments

In the Examiner's Answer, the Examiner rejects claims 20-31, 33-41, 71, and 73 under 35 U.S.C. § 103(a) as being unpatentable over Schrenk in view of Chisholm and further in view of Wood. The Examiner also rejects claims 32, 42, 72, and 74-76 under 35 U.S.C. 103(a) as being unpatentable over Schrenk in view of Chisholm and further in view of Wood and Laird. Appellant respectfully traverses these rejections.

The Examiner generally contends that Schrenk discloses all of the limitations of independent claim 20, except the Examiner acknowledges that Schrenk does not disclose

providing fibers in a pre-cut form and that Schrenk does not disclose distributing the plurality of pre-cut fibers in a “fluidized stream.” The Examiner therefore relies upon Chisholm for the distribution of pre-cut fibers in a fluidized stream.

As in the Final Office Action, in the Examiner’s Answer the Examiner first maintains that “Chisholm discloses a similar method [to that of Schrenk] with providing a plurality of pre cut fibers been distribute in a fluidized stream.” (Page 5 of the Examiner’s Answer). However, the Examiner later states that “[t]he secondary reference ‘922 was only provided to show the step of contributing ‘pre-cut fibers’.” (Pages 10-11 of the Examiner’s Answer). As apparently recognized by the Examiner, the use of air disclosed by Chisholm is specifically for the purpose of forming a bubble in the tube 34, not for fluidizing the flocking strands 31 in a stream. Indeed, Chisholm must use a centrifugal force to overcome the air stream of extrusion head 35. As such, the Examiner does not (and can not) assert that Chisholm discloses “distributing the plurality of pre-cut fibers in a fluidized stream.” Rather, the Examiner suggests that Chisholm “discloses the use and help of air to distribute the fiber around and over the tube, which is equivalent to the claimed ‘fluidized stream’.” (Page 11 of the Examiner’s Answer). Based upon this characterization, the Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of making a fiber web of Schrenk by substituting the filament of Schrenk with pre-cut fibers as allegedly disclosed by Chisholm and further distributing the pre-cut fibers by fluidizing the fibers in a fluidized stream as allegedly suggested by Chisholm. However, in the Examiner’s Answer, as in the previous rejections, the Examiner provides no motivation or suggestion to modify the process of Schrenk to include distributing the fibers by fluidizing the fibers in a fluidized stream.

As detailed in Appellants' Appeal Brief, Appellant respectfully submits that neither Schrenk nor Chisholm disclose or suggest, among other things, distributing a plurality of pre-cut fibers in a fluidized stream inside a film bubble as recited in independent claims 20 and 42. Rather, and in contrast to the use of a fluidized stream, Schrenk and Chisholm each rely upon the use of centrifugal force for the distribution of filament. However, assuming *arguendo* that all of the features of independent claims 20 and 42 were shown in the cited art, Appellant submits that neither Schrenk nor Chisholm, let alone newly cited Wood or Laird, provides motivation to modify the process of Schrenk to arrive at the process as claimed.

Schrenk is directed to a method for making a filament reinforced sheet by tube extrusion. By contrast, the system of Chisholm is directed to solving the problem of increasing adhesion of flocking filaments to a substrate in an upright fashion and minimizing the wasted flocking material. That is, flocked articles generally are defined as articles having surfaces textured with many small generally oriented fibers, such as carpets and other materials textured with filaments or the like. Although the system of Chisholm may be of particular use with regard to conventional flocked articles such as carpets and other fabrics, there is no suggestion of or motivation for using a non-analogous flocking system and method such as that of Chisholm in combination with a method of preparing filament reinforced polymer sheets, let alone for purposes of making fiber-reinforced polymer bags as claimed.

Without such motivation, Appellant respectfully submits that the claimed invention is not obvious based upon Schrenk, Chisholm, Wood, and Laird, taken alone or in combination. For at least this reason, Appellant respectfully submits that the Examiner has not established a *prima facie* case of obviousness under 35 U.S.C. § 103(a).

Furthermore, even assuming *arguendo* that motivation to combine the references did exist, there is no reasonable expectation of success. Under *KSR International Co. v. Teleflex Inc.*, 127 U.S. 1727, L.Ed.2d 705, the combination of prior art elements is required to provide predictable results to support a finding of obviousness. Appellant submits that, even if all of the claim features were disclosed in Schrenk and Chisholm, there is no suggestion or indication that combining the references would yield predictable results. As discussed above and in the Appeal Brief, Schrenk is directed to a method for making a filament reinforced sheet by tube extrusion, wherein the reinforcing filament ultimately is sandwiched between two polymer layers. By contrast, the system of Chisholm is drawn to solving the problem of increasing adhesion of flocking filaments to a substrate specifically in an upright fashion to minimize the wasted flocking material. This is of particular use with regard to conventional flock articles such as carpets and other fabrics. Appellant submits that one of ordinary skill in the art would not combine Schrenk and Chisholm because, among other things, the results of combining Schrenk's method of making a fiber web with Chisholm's method of flocking a substrate would not be predictable.

In the new grounds of rejection, the Examiner concedes that Schrenk does not disclose forming body panels from the fiber-reinforced sheets and closing the body panels to form a bag. The Examiner relies upon Wood as allegedly disclosing a similar method "of forming a bag via folding and sealing thermoplastic film to shape the film into bags." (page 5 of the Examiner's Answer). Appellant submits that none of the prior art cited discloses or suggests making reinforced bags from fiber reinforced panels. Furthermore, there is no motivation to combine the cited references to describe a reinforced bag made from a fiber-reinforced sheet based upon the prior art cited.

At least for these reasons, pending independent claims 20 and 42 are allowable over the prior art of record. Additionally, dependent claims 21-41 and 71-76 are allowable at least for the reasons above, for depending from claims 20 and 42. Furthermore, dependent claims 21-41 and 71-76 are also allowable for the additional features disclosed in those dependent claims, as set forth in the Appeal Brief.

Claims 32, 42, 72, and 74-76

In the new grounds of rejection, the Examiner rejects claims 32, 42, 72, and 74-76 under 35 U.S.C. § 103(a) as being unpatentable over Schrenk in view of Chisholm and further in view of Wood and Laird.

As with claim 20, claim 42 recites a process for making a fiber-reinforced bag including, among other things, distributing a plurality of pre-cut fibers in a fluidized stream inside a film bubble. Independent claim 42 further recites, among other things, providing the plurality of pre-cut fibers with an electrical charge to assist in improving the affinity of the plurality of pre-cut fibers to the film bubble.” The Examiner relies upon Laird as disclosing “the use of electrically charged fiber.” (Page 8 of the Examiner’s Answer). Appellant respectfully traverses this rejection.

As discussed above with regard to claim 20, Schrenk and Chisholm, alone and in combination, do not disclose or suggest a process for making a fiber-reinforced bag by distributing a plurality of pre-cut fibers in a fluidized-stream, among other things. Appellant submits that Wood does not disclose distribution of fibers at all, let alone the use of a fluidized stream or electric charge. As such, independent claim 42 is allowable at least because Schrenk,

Chisholm, Wood, and Laird, individually and in combination, do not disclose or suggest each and every feature as claimed.

Likewise, and as apparently recognized by the Examiner, Laird also does not disclose the use of a fluidized stream for the distribution of filaments inside a film bubble. Rather, Laird merely discloses depositing flock fibers onto a screen and using a brush to force the fibers therethrough. An alternating electric field is created to embed and re-embed fibers into a charged substrate. (See col. 3, lines 13-30).

Furthermore, there would have been no motivation to combine or rely upon Laird to modify the process of Schrenk to substitute Schrenk's fiber with electrically charged fiber as suggested by the Examiner in the Examiner's Answer. For example, one of skill in the art would not look to the non-analogous flocking art of Laird when seeking improvements for the fiber-reinforced sheet of Schrenk.. Additionally, and unlike the flocked articles of Laird, there is no need to embed filaments into the polymer bubble of Schrenk since the filaments will be sandwiched between two layers when the process of Schrenk is completed. Hence, independent claim 42 is allowable at least for the foregoing reasons.

At least for these reasons, pending independent claims 20 and 42 are allowable over the prior art of record. Additionally, dependent claims 21-41 and 71-76 are allowable at least for the reasons above, for depending from claims 20 and 42. Furthermore, dependent claims 21-41 and 71-76 are also allowable for the additional features disclosed in those dependent claims, as set forth in the Appeal Brief.

Furthermore, dependent claims 73 and 74 are allowable for the following additional reasons. Dependent claims 73 and 74 recite "wherein the plurality of fibers ... are dispersed in a randomized pattern." The Examiner relies upon Chisholm as disclosing "distributing the fibers

between layers in a randomized pattern, see for example FIG. 3.” (Page 9 of the Examiner’s Answer). Appellant respectfully submits that, contrary to the Examiner’s assertion, none of the cited prior art discloses or suggests providing fibers with an electrical charge and distributing the fibers in a randomized pattern. For example, the centrifugal distribution of filaments relied upon by Schrenk and Chisholm would inherently result in uniform placement rather than a randomized pattern (See FIGS. 4-6 of Chisholm), Laird explicitly states that “[t]he flock align themselves in the direction of the electrostatic field lines and therefore maintain a non-random orientation relative to the substrate.” (col. 3, lines 27-30). Hence, claim 74 as well as claim 73 are allowable over the prior art.

Furthermore, even assuming *arguendo* that Chisholm does disclose distributing fibers in a randomized pattern and that motivation to combine the references did exist, as suggested by the Examiner, Appellant respectfully submits that there can be no reasonable expectation of success. Under *KSR International Co. v. Teleflex Inc.*, 127 U.S. 1727, L.Ed.2d 705, the combination of prior art elements is required to provide predictable results to support a finding of obviousness. Appellant submits that, even if all of the claim features were disclosed in Schrenk, Chisholm, Wood, and Laird, there is no suggestion or indication that combining the references would yield predictable results. In particular, as detailed above, Laird explicitly teaches away from distributing fibers in a randomized pattern. Appellant submits that one of ordinary skill in the art would not combine the electrical charging of Laird to the combination of Schrenk, Chisholm, and Wood, because, among other things, the results of combining Laird’s non-random oriented flocking system with the disclosures of Schrenk, Chisholm, and Wood would not be predictable. As such, Appellant respectfully submits that a person having ordinary skill in the art could not

have combined the disclosures of Schenk, Chisholm, Wood, and Laird in such a way that encompassed the rejected claims, nor would the benefits or results have been predictable.

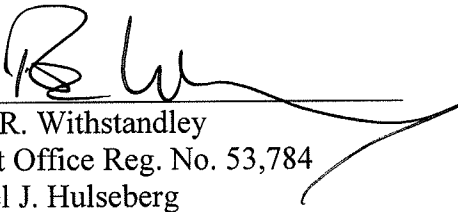
For the foregoing reason, Appellant submits that claims 73 and 74 are allowable over the prior art of record.

For the foregoing reasons and the arguments set forth above, as well as those set forth in the Appeal Brief and during prosecution, the Examiner's rejections of claims 20-42 and 71-76 should be reversed.

Appellant authorizes the Commissioner to charge any additional fees and/or credit any overpayments associated with this paper to Baker Botts L.L.P. Deposit Account No. 02-4377, Ref. No. 077409.0455. Further, if a fee is required for an extension of time under 37 C.F.R. § 1.136 not provided for above, Appellant requests such extension and authorizes the charging of the extension fee to Baker Botts L.L.P. Deposit Account No. 02-4377, Ref. No. 077409.0455.

Respectfully submitted,

Dated: September 23, 2009

By: 
Peter R. Withstandley
Patent Office Reg. No. 53,784
Daniel J. Hulseberg
Patent Office Reg. No. 36,554
Attorneys for Appellant
Telephone: (212) 408-2500
Baker Botts L.L.P.
30 Rockefeller Plaza
New York, NY 10112